1.	Record Nr.	UNINA9910785240803321
	Titolo	Porous media : applications in biological systems and biotechnology / / editor, Kambiz Vafai
	Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis, , 2011
	ISBN	0-429-14162-9 1-4200-6542-4
	Descrizione fisica	1 online resource (602 p.)
	Altri autori (Persone)	VafaiK (Kambiz)
	Disciplina	610.28/4
	Soggetti	Biomedical materials Biotechnology - Materials Porous materials - Fluid dynamics Porous materials - Thermal properties Tissue engineering Biofilms
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	A CRC title.
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	Front cover; Contents; Preface; Editor; Contributors; Chapter 1: A General Set of Bioheat Transfer EquationsBased on the Volume Averaging Theory; Chapter 2: Mathematical Models of Mass Transferin Tissue for Molecular Medicine with Reversible Electroporation; Chapter 3: Hydrodynamics in Porous Media with Applications to Tissue Engineering; Chapter 4: Biomedical Implications of the Porosity of Microbial Biofilms; Chapter 5: Influence of Biofilms on Porous Media Hydrodynamics; Chapter 6: Using Porous Media Theory to Determinethe Coil Volume Needed to Arrest Flow in Brain Aneurysms Chapter 7: Lagrangian Particle Methods for Biological SystemsChapter 8: Passive Mass Transport Processes in CellularMembranes and their Biophysical Implications; Chapter 9: Skin Electroporation: Modeling Perspectives; Chapter 10: Application of Porous Media Theories in Marine Biological Modeling; Chapter 11: The Transport of Insulin-Like Growth Factor through Cartilage; Chapter 12: Biotechnological and BiomedicalApplications of Magnetically Stabilized and Fluidized Beds; Chapter 13: In Situ Characterizations of Porous Mediafor Applications in

Biofuel Cells: Issues and Challenges

Chapter 14: Spatial Pattern Formation of MotileMicroorganisms: From GravitacticBioconvection to Protozoan Culture DynamicsBack cover

Sommario/riassunto	Presenting state-of-the-art research advancements, Porous Media: Applications in Biological Systems and Biotechnology explores innovative approaches to effectively apply existing porous media technologies to biomedical applications. In each peer-reviewed chapter, world-class scientists and engineers collaborate to address significant problems and discuss exciting research in biological systems.The book begins with discussions on bioheat transfer equations for blood flows and surrounding biological tissue, the concept of electroporation, hydrodynamic modeling o

2.

Record Nr.	UNINA9911004745603321
Autore	Sheng James
Titolo	Modern chemical enhanced oil recovery : theory and practice / / James J. Sheng
Pubbl/distr/stampa	Burlington, MA, : Gulf Professional Pub., 2010
ISBN	1-282-87880-8
	9786612878800
	0-08-096163-0
Descrizione fisica	1 online resource (647 p.)
Disciplina	622/.33827
Soggetti	Enhanced oil recovery
	Oil reservoir engineering
	Oil fields - Production methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; Modern Chemical Enhanced Oil Recovery; Copyright page; Table of contents; Preface; Acknowledgments; Nomenclature; Greek Symbols; Superscripts; Subscripts; Chapter 1: Introduction; Enhanced Oil Recovery's Potential; Definitions of EOR and IOR; General Description of Chemical EOR Processes; Performance Evaluation of EOR

Sommario/riassunto	Crude oil development and production in U.S. oil reservoirs can include up to three distinct phases: primary, secondary, and tertiary (or enhanced) recovery. During primary recovery, the natural pressure of the reservoir or gravity drive oil into the wellbore, combined with artificial lift techniques (such as pumps) which bring the oil to the surface. But only about 10 percent of a reservoir's original oil in place is typically produced during primary recovery. Secondary recovery techniques to the field's productive life generally by injecting water or gas to displace oil and drive it to a pro